




CA20N
H 710
-79H26

GOVT



Digitized by the Internet Archive
in 2024 with funding from
University of Toronto

<https://archive.org/details/31761118938810>

CA2φN
H 710
-79H26

2

Government
Publications

REPORT OF THE
HOME ACCIDENT PREVENTION COMMITTEE
HEALTH PROGRAMS DIVISION
ONTARIO MINISTRY OF HEALTH

(NOT MINISTRY POLICY)

DECEMBER 15, 1979.

December 15, 1979.

Dr. Barbara J. Blake,
Director,
Public Health Branch,
Health Programs Division,
Ontario Ministry of Health.

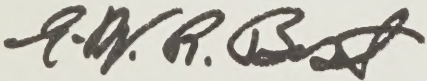
Dear Dr. Blake:

I am pleased to present to you this final report of
the Home Accident Prevention Committee.

Particular attention has been given to epidemiological
issues i.e. Magnitude of the Problem of Home Accidents;
Surveillance; and Effectiveness of Home Accident
Prevention Services.

The Committee considers that this report is a useful
reference on home accident prevention and that it should
be made available to interested persons and agencies.

Sincerely yours,



E. W. R. Best, M.D., D.P.H., F.R.C.P.(C),
Chairman,
Home Accident Prevention Committee.

Att.

ACKNOWLEDGEMENT

The Committee acknowledges with sincere thanks the support provided by Medical Officers of Health and representatives of provincial and national organizations who responded to our enquiries and also the resource persons, the Ministry Library and the Data Development and Evaluation Branch.

TABLE OF CONTENTS

	<u>Page</u>
1. Summary and Conclusions	1
2. List of Recommendations	4
3. Introduction	5
4. Terms of Reference	6
5. Committee Composition - Resource Persons	7
6. Methodology	9
7. Definitions	11
8. Existing Legislation	12
9. Magnitude of the Problem of Home Accidents	13
10. Economic Impact	18
11. Effectiveness of Home Accident Prevention Services	19
12. Recommended Minimum Service Levels	20
13. Minimum Service Level One	21
14. Minimum Service Level Two	22
15. Minimum Service Level Three	23
16. Monitoring of Minimum Service Levels	25

APPENDICES

	<u>Page</u>
1. Letter to Medical Officers of Health	26
2. Responses from Medical Officers of Health	28
3. Letter to Provincial and National Organizations	31
4. Provincial and National Organizations Responding to the Committee's Enquiry	33
5. Responses from Provincial and National Organizations	34
6. Circulation of Final Draft Report	36
7. Classification of Home Accidents	38
8. Project FACTS (First Aid Community Training for Safety)	41
9. St. John Ambulance Safety Oriented First Aid Courses	44
10. Rejection of Home Accident Surveillance	45
<u>BIBLIOGRAPHY</u>	46

TABLES

	<u>Page</u>
1. Accidental Home Deaths 1977 Occurring in Ontario (Tentative Data) by External Cause.	14
2. Home Accidents, Age and Sex Specific Incidence, Bristol U.K., May 1971 - June 1973.	16
3. Crude Estimated Incidence of Persons Seeking Medical Care after a Home Accident, Ontario, 1977.	17
4. Crude Estimated Costs of Accidents in Ontario Homes (ALL TYPES) - 1977.	18
5. Reduction of Industrial Accidents in First Aid Trained Employees in Five Companies (Appendix 8).	43

1. SUMMARY AND CONCLUSIONS

1. Magnitude of the problem of home accidents

- . Home accidents are a cause of injury, disability and death. They create a demand for emergency health services and long term care with associated direct and indirect costs, particularly among infants and children under five years of age and adults age sixty-five years and over.
- . The only useful information on the magnitude of the problem of home accidents in Ontario is mortality data. There is no useful information on the extent of home accident morbidity and the associated direct and indirect costs in Ontario.
- . The unreliability of using data from other countries for making estimates in Ontario is well known.
- . Rather than having no concept of home accident morbidity and costs in Ontario, the Committee chose to make estimates fully aware of the foregoing limitations. Morbidity and cost estimates in this report have been derived from a children's hospital in Toronto, an epidemiological study in the United Kingdom, and from the National Safety Council, United States of America. Accidents occurring in Ontario in 1977 may have caused an estimated 141,130 persons to seek medical care. There were an estimated 895 deaths due to home accidents in 1977 with the highest incidence in the age groups 0 - 4 years and 65 years and over.

2. Economic Impact

- . Extrapolating from American data, the 1977 costs for accidents occurring in all types of homes in Ontario, including continuing costs incurred for similar accidents which happened in previous years, may have been:

- medical expenses, including doctors fees, hospital charges, cost of medicines and other medical expenses incurred as a result of accidental injuries up to	\$ 75,267,500
- wage loss, up to	\$141,680,000
- insurance administration, up to	\$ 4,427,500
- fire loss, up to	\$ <u>70,840,000</u>
T O T A L:	<u>\$292,215,000</u>

3. Efficacy of home accident prevention services

- . Both environmental and human factors contribute to home accidents
- . Control of some environmental factors is effective in preventing home accidents and mechanisms for control are already in place.
- . There is evidence that occasional health education exposures are not effective in improving home safety behaviour.
- . In industry, first aid training plus frequent reinforcing safety messages can reduce accidents by up to 30 - 40%. This success model provides fundamental direction for public health services. The Local Official Health Agency should advocate locally available first aid courses and general courses which include home accident prevention elements. The Local Official Health Agency should also provide frequent safety messages to stimulate and reinforce public home safety awareness.

4. Leadership in prevention

- . The Local Official Health Agency is the focal point for preventive health services in the community. Consequently, it should assume an informed leadership role in the prevention of home accidents.

5. Legislation

- . The enactment into legislation of minimum service levels on home accident prevention to be provided by Local Official Health Agencies would be unique in North America.

6. Provincial Support

- . Implementation of the three recommended minimum service levels will require the committed support of the Ministry of Health.
- . Essential Ministry support includes:
 - the designation of a person within the present staff complement of the Public Health Branch to include home accident prevention as a part of his or her functions and to serve as a home accident prevention liaison officer at the provincial level

- liaison with provincial agencies and ministries interested in home accident prevention
- maintenance of a comprehensive home accident prevention resource information file
- provision of reference lists and educational materials to Local Official Health Agencies
- mass media initiatives
- research, particularly epidemiological studies on the magnitude of the problem and the efficacy of specific preventive measures (through Public Health Research Grants)
- stimulation of pilot projects and local initiatives
- staff time and resources to support the foregoing
- financial support for Local Official Health Agency professional home accident prevention services is not necessary since these services are part of other programs. However, funding up to \$602,000 should be provided for home accident prevention clerical services and home accident prevention resource information files.

2. LIST OF RECOMMENDATIONS

Minimum Service Levels

1. The Local Official Health Agency shall serve as a centre for information on home accident prevention.
2. The Local Official Health Agency shall develop and maintain liaison with other community agencies involved in home accident prevention.
3. The Local Official Health Agency shall maintain education and counselling services pertaining to home accident prevention as part of existing home visiting and group discussion activities.

Advocacy of First Aid Training

4. The Local Official Health Agency should advocate locally available first aid courses and general courses which include home accident prevention elements both as a means of acquiring basic health service skills and as a means of stimulating and reinforcing public safety awareness. Such courses are provided by St. John Ambulance and by the Canadian Red Cross Society.
5. Staff members of the Local Official Health Agency should be encouraged to attend first aid courses periodically.

Implementation of Home Accident Prevention Services

6. Home accident prevention services of the Local Official Health Agency should be part of existing programs; they should not constitute a separate program.

Provincial Support

7. The Ministry of Health should provide funding up to \$602,000 to Local Official Health Agencies for home accident prevention clerical services and home accident prevention resource information files.
8. The Ministry of Health should designate a person within the present staff complement of the Public Health Branch to include home accident prevention as part of his or her functions and to serve as a home accident prevention liaison officer at the provincial level.
9. The Ministry of Health should commit available resources, including data analysis, to support accident prevention services provided by Local Official Health Agencies and to support the Ministry's Home Accident Prevention Liaison Officer.

3. INTRODUCTION

In May, 1979 the Minister of Health, the Honourable Dennis R. Timbrell, announced a number of new initiatives in public health which would be developed in the coming months. One of these initiatives related to the need to develop a package of basic public health services which would be incorporated into provincial legislation and be available to every resident in Ontario through his/her Local Official Health Agency.

Subsequent to the announcement a number of committees were formed to develop minimum service levels to be included in this "package". One of the committees was established to consider the development of minimum service levels in Home Accident Prevention. This report details the work of the Home Accident Prevention Committee and its final conclusions and recommendations.

4. TERMS OF REFERENCE

"To consider the development of minimum service levels or standards for home accident prevention programs which local official health agencies may be required, by statute and regulation, to implement". It is suggested that each committee consider the following questions:

- a) WHY is it necessary to develop standards or minimum service levels for the program being considered, i.e. is there a need?
- b) If a need is identified, WHAT standards of minimum service levels might be appropriate for the program being considered?
- c) Given the positive resolution of (a) or (b), the question which the committees must then address is HOW are the standards to be implemented and what monitoring mechanism might be necessary or desirable to ensure that local health agencies are indeed carrying out these mandatory responsibilities?
- d) In addition to the foregoing, the committees will have to give some indication of additional costs which might be incurred as a result of the implementation of core programs.

5. COMMITTEE COMPOSITION AND REPRESENTATION

Association of Nursing
Directors and Supervisors
of Ontario Official Health
Agencies

- Mrs. Joanne Perry,
Nursing Supervisor,
Etobicoke Community
Health Department

Canadian Institute of
Public Health Inspectors,
Ontario Branch

- Mr. Donald Sullivan,
Public Health Inspector,
Middlesex-London District
Health Unit

Society of Medical
Officers of Health of
Ontario

- Dr. A.I. Cunningham,
Medical Officer of Health,
Hamilton-Wentworth
Regional Health Unit

Health Programs Division,
Ontario Ministry of Health

- Dr. E.W.R. Best,
(Chairman),
Area Medical Officer,
Public Health Branch
- Mr. A. Chiasson,
Consultant,
Public Health Inspection
Service
- Mr. P.W.T. Willmott,
Co-ordinator,
Public Health Legislation
- Miss Jean Thomson,
Consultant,
Public Health Nursing
Service.

RESOURCE PERSONS

- | | | |
|--|---|---|
| Toronto Department of
Public Health | - | Mrs. Gayle Biette,
Adult Health and Rehabili-
tation Consultant,
Nursing Division, |
| Ontario Ministry of
Health | - | Dr. J.B. Armstrong,
Senior Medical Consultant,
Program Development Branch |
| | - | Mr. D. Burton,
Health Education Consultant,
Public Health Branch |
| | - | Mr. J. Cross,
Senior Analyst,
Fiscal Resources Branch |
| | - | Mrs. Jean Jonescu,
Project Team Assistant
(Writer),
Health Programs Division |
| | - | Dr. R.A. LaForest,
Senior Medical Consultant,
Health Education Promotion
Unit |

6. METHODOLOGY

Meetings

The Committee met eight times, starting on July 12, 1979 and ending on November 21, 1979.

Questionnaire Surveys

Two questionnaire surveys were conducted. Details are presented in Appendices 1 - 5.

SURVEY ONE

- Appendix 1 - Letter to Medical Officers of Health.
- Appendix 2 - Responses from Medical Officers of Health.

SURVEY TWO

- Appendix 3 - Letter to Provincial and National Organizations.
- Appendix 4 - Provincial and National Organizations responding to the Committee's enquiry.
- Appendix 5 - Responses from Provincial and National Organizations.

Literature Surveys

The Ministry of Health Library carried out two literature searches on the subjects: "Prevention of Home Accidents" and "Child Home Accidents". Some of these references are cited in the Bibliography (page 46).

In addition, standard Public Health references in the Library were reviewed.

Data Retrieval

A search was conducted for mortality and morbidity data available in the Ministry of Health. A fundamental problem was encountered: the place of occurrence of accidents is not systematically recorded. However, useful mortality data was found. Unfortunately, available hospital data and medical care data was not useful for establishing the magnitude of the problem of home accidents in terms of morbidity.

Circulation of Final Draft Report to Users

On October 26, the final draft report of the Committee (October 24, 1979) was circulated to Medical Officers of Health and to interested organizations:

Appendix 6 - Circulation of Final Draft Report.

On November 21, 1979 at its last meeting the Committee reviewed the replies received and initiated preparation of its final report.

7. DEFINITIONS

ACCIDENT

An unintended event resulting in human injury.

HOME

For the purposes of the Committee a home includes but is not necessarily limited to the following:

Apartment	Private
Boarding House	Driveway to home
Farm House	Garage
Home Premises	Garden to home
House (residential)	Swimming pool in private
Non-institutional place	home/garden
of residence	Yard to home

Note One: Institutions established under the authority of local/provincial/federal legislation (including safety provisions) are NOT included in this definition.

Note Two: The Bristol Study of Home Accidents (1971-73) excluded accidents in boarding houses.

Note Three: A home is not defined in Accident Facts, 1978 Edition, National Safety Council, U.S.A.

LOCAL OFFICIAL HEALTH AGENCY

A local Board of Health and its service component established under the authority of The Public Health Act and Regulations.

MINIMUM SERVICE LEVEL (Standard)

A statement describing the basic level of service which must be provided by all Local Official Health Agencies in the Province of Ontario.

Note: This statement should describe the level of performance or specification against which one can measure organizational achievement, functional activities, individual effort or physical and personnel resources. It should assist in establishing measures of input, process and outcome of health agency program and services.

PREVENTION

Specific measures taken to prevent the occurrence of an accident in the home directed toward human and environmental factors.

PROGRAM

A variety of activities combined to achieve specific goal oriented objectives.

8. EXISTING LEGISLATION

As indicated in Section 6 of this report (Methodology), a number of jurisdictions both in the U.S.A. and Canada were contacted regarding existing home accident legislation. In addition legislation currently in force in Ontario was reviewed.

In all jurisdictions there is an abundance of legislation pertaining to safety. In Ontario, such legislation is intended to ensure product, building and construction and daily living safety. For example, the regulation under the Nursing Home Act includes provisions relating to the height of handrails, the pitch of stairs, the intensity of lighting etc.

All of the above provisions are enacted by governments at various levels in order to impose a degree of regulation upon the public, while at the same time endeavouring to protect the rights of the majority. Despite extensive search, the Committee was unable to identify any legislative provisions which imposed a similar degree of responsibility on government in relation to the level of service to be provided.

In summary, the Committee was unable to identify any legislation pertaining to home accident prevention similar to that recommended in this report (page 20).

9. MAGNITUDE OF THE PROBLEM OF HOME ACCIDENTS

Accidents in the home may be a serious cause of disability and death. It is not clear, however, from the evidence at hand, just how serious they are. In 1977 they represented just under 1.5% of all deaths in Ontario.

Accidental deaths in the home occur at all ages but more frequently under the age of five and ages 65 years and over. The rates per 100 thousand population for 1977 (Table 1 - page 14, tentative data) were:

Ages in years	0 - 4	60 - 64	65+	All ages
both sexes	13.64	16.06	46.30	10.69

This data has required a measure of interpolation as the listing of causes of death by external cause does not distinguish the place of the falls, fires, poisonings or drownings. As motor vehicle, water transport and industrial accidents have been removed, it is assumed that the balance have taken place in or about the home, knowing that this is not necessarily so.

For children, injury data has been obtained from the Hospital for Sick Children, Toronto, for the years 1974 to 1977, inclusive. With the exclusion of transportation, purposely or self-inflicted and sports injuries, the number of injured persons seen at the Hospital is remarkably constant (mean annual contacts 12,678+225 with 1016+61 mean annual admissions and 15.5+ 6.7 mean deaths).

In order of frequency, falls were the common reason for attention, followed by bumps and blows, cutting and piercing wounds, over-exertion and foreign bodies in various apertures but most seriously in the respiratory tract. Poisoning is eighth in the list and shows the most consistent reduction in the four years examined. There was only one death from poisoning in four years at the Hospital.

Using the Ontario data for provincial deaths, and the Hospital for Sick Children data for contacts, it can be estimated that for the reported mortality in 1977 it would require the following number of contacts with hospitals for the more serious forms of home accident.

	<u>1977 deaths Ontario 0 - 19 years</u>	<u>Number of possible contacts</u>
falls	12	30,650
poisonings	9	20,520
burns	56	8,908
foreign bodies "respiratory"	69	6,210
all home accidents	152	124,315

In 1977 home accidents may have resulted in 124,315 hospital contacts in Ontario.

TABLE 1
ACCIDENTAL, HOME DEATHS 1977 OCCURRING IN ONTARIO (TENTATIVE DATA) BY EXTERNAL CAUSE
Age Groups in years

	0-4	5-9	10-14	15-9	20-9	30-9	40-9	50-9	60-4	65+	Total	%
Falls E880-7	T 6 M 3 F 3	3 3 0	2 1	1 1 0	6 5 1	3 2 1	25 16 9	37 21 16	26 18 8	219 96 123	328 166 162	36.6
* Other incl incl. late effects. E910-26	T 43 M 27 F 16	7 4 3	11 8 3	11 9 2	21 17 4	16 10 6	21 13 8	19 13 6	12 11 1	60 34 26	221 146 75	24.7
928-9 942-8												
Fires E890	T 30 M 16 F 14	15 9 6	6 2 4	5 5 0	27 16 11	27 17 10	20 14 6	18 9 9	7 4 3	37 16 21	192 108 34	21.5
892-5 898-9												
Poisonings E850	T 0 M 0 F 0	0 0 0	0 0 0	9 7 2	20 14 6	24 17 7	33 21 12	20 8 12	7 1 6	19 11 8	132 79 53	14.7
-77												
Natural & environ- mental E900-9	T 5 M 2 F 3	0 0 0	0 0 0	0 0 0	0 0 0	1 1 0	1 1 0	3 2 1	1 1 0	11 3 8	22 10 12	2.5
Totals	T 84 M 48 F 36	25 16 9	19 11 8	26 22 4	74 52 22	71 47 24	100 65 35	97 53 44	53 35 18	346 160 186	895 386 509	100.0
Population both sexes (000)	615.7	677.0	809.3	813.3	1480.2	1092.6	959.1	884.6	330.1	747.3	8,373.5	
Deaths per 100,000 population	13.64	3.69	2.35	3.18	5.00	6.50	10.43	11.48	16.06	46.30	70.69	

* includes drowning, suffocation, foreign body, overexertion, electric current accidents etc.
Information from which this table was tabulated by the Data Development and Evaluation Branch, Information Systems
Division, Ontario Ministry of Health from tentative data provided by the Office of the Registrar General.

Similar data for the other end of the age spectrum, 65 years and over, is not readily available. Data from other jurisdictions would seem to suggest that falls are the predominant cause of home accidents, particularly in females (3.4 to 1). The falls tend to occur when persons are mobile, peaking at 10:00 a.m. and 3:00 p.m. Falls tend to occur more frequently toward the end of the week and the end of the year. The living room is the most common place of occurrence (34%) followed by stairs (22%) hall (12%), bedroom and kitchen (both 11%) and then toilet and washroom (7%). For all these locations, slippery surfaces were noted as the most frequent cause, overwhelmingly when coupled with the second, a loose rug (a ratio of 7.4 to 1 over poor lighting). Dizziness, sudden indisposition or sudden weakness are the most common causes for a fall. As might be expected, a broken leg was the most common injury (30%) followed by a broken arm (21%).

In Calgary (1978) falls in the elderly represented over 80% of accidental deaths 65 years and over. The next commonest was accidents caused by fires (6%) and the balance was undetermined as to cause.

The experience of Ontario Hydro employees* is that a high percentage of accidental injuries off the job occur in and around the home. In 1978, 24 public electrical home accidents were reported to Ontario Hydro, 7(29%) fatal and 17 (71%) non-fatal.

A classification of home accidents within the International Classification of Diseases, Injuries and Causes of Death, WHO, Geneva, 1977 is presented in Appendix 7 (page 38).

The Bristol Home Accident Study, U.K. 1971 - 1973

The only population based epidemiological study on the age/sex incidence of home accidents found by this Committee was carried out in Bristol, U.K.

The Medical Research Division, Health Education Council, U.K., has conducted epidemiological studies on the health and social impact of home accidents and the implications for health education. One of these studies took place in North East Bristol during the period May 1971 - June 1973 (Report No. 116, July 1974).

The study population base was 126,000 residents in an urban community. There were 250,000 person years of exposure. A total of 4,600 cases of home accidents were investigated.

The estimated age and sex incidence rates per 100,000 population of home accidents in the Bristol study is presented in Table 2, (page 16). This is the most useful data on age and sex incidence of home accidents found by the Committee. These rates, when applied to the 1977 population of Ontario, result in crude estimates set out in Table 3, page 17. By this method, an estimated 141,130 persons sought medical care for home accidents in Ontario in 1977.

* Ontario Hydro, Health Services Department, Morbidity Report 1978, HSD2

TABLE 2

HOME ACCIDENTS, AGE AND SEX SPECIFIC INCIDENCE

BRISTOL, U.K., MAY 1971 - JUNE 1973*

Frequency, Percentage Frequency and Estimated Incidence per hundred thousand population per year of persons seeking medical care after a home accident in the study area by age and sex.

Age at Interview in Years	Frequency			Percentage Frequency			Estimated Incidence per 100,000 population per year		
	Males	Females	Total	Males %	Females %	Total %	Males	Females	Total
0 - 4	622	447	1069	35.0	18.3	25.3	7222	5358	6305
5 - 14	319	244	563	18.0	10.0	13.3	1830	1485	1663
15 - 44	467	671	1138	26.3	27.5	27.0	954	1430	1186
45 - 64	207	523	730	11.7	21.4	17.3	657	1503	1101
Over 64	160	558	718	9.0	22.8	17.0	1144	2284	1869
Age recorded	1775	2443	4218	100.0	100.0	100.0
Age not recorded	8	13	21 ¹	=====	=====	=====
All persons seeking medical care	1783	2456	4239				1480	1876	1686

1 In twenty-one cases, age had not been recorded and could not be estimated retrospectively.

*Source: Home Accidents and Health Education Investments, Health Education Council, U.K., Medical Research Division, Report No. 116, July 1974.

TABLE 3

CRUDE ESTIMATED INCIDENCE OF PERSONS SEEKING MEDICAL CARE

AFTER A HOME ACCIDENT, ONTARIO, 1977*

Age (Years)	Estimated Incidence Per 100,000 Population/year**		Ontario Population 1977***		Crude Estimate of Persons Seeking Medical Care After A Home Accident Ontario, 1977		
	Male	Female	Male	Female	Male	Female	Total
0 - 4	7,222	5,358	316,051	299,603	22,825	16,053	38,878
5 - 14	1,830	1,485	761,319	724,976	13,932	10,766	24,698
15 - 44	954	1,430	1,946,930	1,924,633	18,574	27,522	46,096
45 - 64	657	1,503	812,563	840,152	5,339	12,627	17,966
65+	1,144	2,284	313,658	433,615	3,588	9,904	13,492
TOTAL:	-	-	4,150,521	4,222,979	64,258	76,872	141,130

* Prepared with the assistance of the Data Development and Evaluation Branch,
Ontario Ministry of Health.

** Source - Home Accidents and Health Education Investments, Medical Research Council,
U.K., Report No. 116, July 1974.

*** Ontario 1977 population figures are T.E.I.G.A. estimates for that year adjusted
from the 1976 census.

10. ECONOMIC IMPACT

The only comprehensive source of data on the economic impact of home accidents found by the Committee was "Accident Facts", 1978 Edition, published by the National Safety Council, U.S.A. From these, crude estimates of costs in Ontario may be derived by applying the following factor:

$$\frac{(1977 \text{ population, Ontario}) \quad 8,373,500}{(1977 \text{ population, U.S.A.}) \quad 217,739,000} \times 100 = 3.85\%$$

TABLE 4CRUDE ESTIMATED COSTS OF ACCIDENTS IN ONTARIO HOMES(ALL TYPES) - 1977

		<u>U.S.A.</u>	<u>Ontario Crude Estimates</u>	
		<u>U.S.\$</u>	<u>U.S.\$</u>	<u>Can.\$ **</u>
Wage loss	3,200,000,000		123,200,000	141,680,000
Medical Expenses*	1,700,000,000		65,450,000	75,267,500
Insurance Adminis- tration	100,000,000		3,850,000	4,427,500
Fire loss	<u>1,600,000,000</u>		<u>61,600,000</u>	<u>70,840,000</u>
TOTAL:	<u>6,600,000,000</u>		<u>254,100,000</u>	<u>292,215,000</u>

Conclusion:

Extrapolating from American data, the 1977 costs for accidents occurring in all types of homes in Ontario including continuing costs incurred for similar accidents which happened in previous years may have been \$292,215,000.

* Includes doctors fees, hospital charges, the cost of medicines, and all other medical expenses incurred as the result of accidental injuries.

** Using a discount factor of 15%.

11. EFFECTIVENESS OF HOME ACCIDENT PREVENTION SERVICES

Both environmental and human factors contribute to home accidents.

Environmental Factors

There is evidence that control of some environmental factors is effective in preventing home accidents e.g. safety caps on medicine bottles.

There are also many environmental standards relevant to home safety e.g. National Building Code of Canada; Ontario Building Code; Guidelines for Residential Housing, Ontario Ministry of Health.

The Committee believes that mechanisms for control of environmental home safety factors are already in place and that relevant minimum service levels for Local Official Health Agencies are unwarranted.

Human Factors

There is evidence that occasional health education exposures are not effective in improving home safety behaviour.*

In industry, first aid training plus frequent reinforcing safety messages can reduce accidents up to 30 - 40%. This was the main finding of a recent three year study supported by the St. John Ambulance Ontario Council, the Workmen's Compensation Board of Ontario and the Industrial Accident Prevention Association of Ontario - "Project FACTS Final Report", N. Agnew and G. Miller, York University, February 1973 (FACTS - First Aid Community Training for Safety).

The aim of Project FACTS was to test the theory that extensive First Aid training can lower the accident rate in industry and throughout the community. Further information on the study may be found in Appendix 8, (page 41).

St. John Ambulance provides a variety of safety oriented first aid courses (Appendix 9, page 44).

The Project FACTS success model provides fundamental direction for public health services.

It should also be recognized that medical practitioners have a large part to play in home accident prevention. They provide direct patient care following accidents and also preventive counselling. The Canadian Task Force on the Periodic Health Examination recommends that physicians use periodic health examinations scheduled for other purposes to encourage safety in the home and the community. (Canadian Medical Association Journal, November 3, 1979)

* D.A. Dershewitz and J.W. Williamson, Prevention of Childhood Household Injuries: A Controlled Clinical Trial. American Journal of Public Health, 66:12, p.p. 1148-1153, December, 1977.

12. RECOMMENDED MINIMUM SERVICE LEVELS

The following minimum service levels are recommended by the Committee:

1. The Local Official Health Agency shall serve as a centre for information on home accident prevention.
2. The Local Official Health Agency shall develop and maintain liaison with other community agencies involved in home accident prevention.
3. The Local Official Health Agency shall maintain education and counselling services pertaining to home accident prevention as part of existing home visiting and group discussion activities.

Responses from Medical Officers of Health indicate that these minimum service levels would be generally acceptable. All Local Official Health Agencies presently provide education and counselling services on home accident prevention.

A fourth minimum service level, on the surveillance of home accidents, was originally proposed. However this was withdrawn for a variety of reasons. (Appendix 10, page 45).

13. MINIMUM SERVICE LEVEL ONE

THE LOCAL OFFICIAL HEALTH AGENCY SHALL SERVE AS A CENTRE FOR INFORMATION ON HOME ACCIDENT PREVENTION

1. What will the service consist of?

- . Collect reports, scientific papers and references on home accident prevention.
- . Collect samples of literature and pamphlets prepared for the public.
- . Stock supplies of pamphlets supplied by the Ministry of Health.
- . Provide up-to-date information to the public on request and as part of existing home visiting and group discussion activities.

2. Why is the service necessary?

- . The Local Official Health Agency is the focal point for preventive health services in the community and is ideally suited to address itself to the prevention of home accidents.

3. What is the current level of activity of Local Official Health Agencies?

- . All Local Official Health Agencies currently provide information on home safety and stock Ministry of Health pamphlets.

4. What will be the target populations?

- . The total community with emphasis on age groups 0 - 4 years and 65+

5. Outcome Objectives

- . Improved public awareness on the importance of home accident prevention.
- . Presence of a comprehensive home accident prevention resource information file in the Local Official Health Agency main office.
- . Prompt response to requests for information.

6. Costs

- . Home accident prevention resource information file
43 agencies @ \$2,000 = \$ 86,000
- . Up to one full-time home accident prevention clerk
in every Local Official Health Agency
43 agencies @ \$ 12,000 = \$516,000
TOTAL: \$602,000

14. MINIMUM SERVICE LEVEL TWO

THE LOCAL OFFICIAL HEALTH AGENCY SHALL DEVELOP AND MAINTAIN LIAISON WITH OTHER COMMUNITY AGENCIES INVOLVED IN HOME ACCIDENT PREVENTION.

1. What will the service consist of?

- . Establish official contacts with other community agencies involved in home accident prevention.
- . Schedule regular meetings with other agencies interested in home accident prevention.
- . Exchange annual reports with other interested agencies on home accident prevention activities carried out in the previous year.

2. Why is the service necessary?

- . Makes use of expertise and resources already available in the community.
- . Promotes development and co-ordination of community expertise and resources.

3. What is the current level of activity of Local Official Health Agencies?

- . Many Local Official Health Agencies have arrangements with hospitals to follow up poisonings.

4. What will be the target populations?

- . Community agencies involved in home accident prevention.

5. Outcome Objectives

- . Increased awareness of locally available home accident prevention expertise and resources.
- . Development and co-ordination of community home accident prevention expertise and resources.

6. Costs

- . Can be done with existing professional staff as part of other programs.

15. MINIMUM SERVICE LEVEL THREE

THE LOCAL OFFICIAL HEALTH AGENCY SHALL MAINTAIN EDUCATION AND COUNSELLING SERVICES PERTAINING TO HOME ACCIDENT PREVENTION AS PART OF EXISTING HOME VISITING AND GROUP DISCUSSION ACTIVITIES.

1. What will the service consist of?

- . Public Health Nurses and Public Health Inspectors shall provide and discuss home accident prevention information during home visits as appropriate.
- . Public Health Nurses and Public Health Inspectors shall provide and discuss home accident prevention information at group meetings as appropriate.

Note: Public Health Nurses and Public Health Inspectors should also advocate locally available first aid courses and general courses which include home accident prevention elements.

2. Why is the service necessary?

- . Education is most effective when carried out on a personal basis when the person contacted is receptive.
- . Meaningful personal and group contacts are a daily feature of Local Official Health Agency activities.
- . The Local Official Health Agency has many opportunities to provide safety messages to stimulate and reinforce public home accident prevention awareness.
- . First Aid and home accident prevention courses also stimulate and reinforce public home accident prevention awareness.
- . Frequent reinforcement of accident prevention messages can change human behaviour and reduce accidents.

3. What is the current level of activity of Local Official Health Agencies?

- . All 30 of the Local Official Health Agencies responding to the questionnaire survey provide education and counselling services as part of existing programs.

4. What will be the target populations?

- . The total community, with emphasis on age groups 0 - 4 years and 65+

5. Outcome Objectives

- . Improved public awareness about home accident prevention.

6. Costs

- . Can be done with existing professional staff as part of other programs.

16. MONITORING OF MINIMUM SERVICE LEVELS

1. Who does it?

- . Local Official Health Agency - management.
- . Ministry of Health - consultants.

2. Methods / Indicators

- . Presence of Local Official Health Agency policy statements on home accident prevention.
- . Presence of an up-to-date home accident prevention resource information file.
- . Official contacts established and maintained with community agencies involved in home accident prevention.
- . Records of requests for home accident prevention.
- . Data collection on services provided by the Local Official Health Agency on home accident prevention.
- . Evidence of staff education in home accident prevention.

3. Economic Impact of the Recommended Services

Implementation of the three recommended minimum service levels would stimulate and reinforce public home accident prevention awareness. This in turn could change human behaviour, leading to a reduction in home accidents and resulting disabilities and associated direct and indirect costs. Even a one percent reduction in the 1977 estimated costs of home accidents would achieve a saving of almost three million dollars and render the program cost-effective.



Ontario

APPENDIX 1

Ministry Health
of Programs
Health Division

416 965-5057

Fifth Floor,
15 Overlea Boulevard,
Toronto, Ontario.
M4H 1A9.

July 20, 1979.

TO: MEDICAL OFFICERS OF HEALTH

RE: Core Home Accident Prevention Programs

Dear Doctor:

This is further to Dr. Martin's letter to you, June 8, 1979 on core public health programs. Among the Committees which have been established to review each program and develop appropriate minimum service levels is that dealing with Home Accident Prevention. Our terms of reference are "to consider the development of minimum service levels or standards for home accident prevention programs which local official health agencies may be required, by statute and regulation, to implement".

At our first meeting on July 12, 1979 we adopted, for the present, the following definition "a home is a private dwelling which is owned or rented by the occupant".

Comments on this definition would be welcome.

Our Committee needs to know what local public health agencies are now doing in the field of home accident prevention. Accordingly I would appreciate your response to the following:

1. Is there a need for your health agency to have minimum service levels for home accident prevention? Please provide data that support your response.
2. What home accident prevention programs and activities does your health agency presently provide? Please indicate the types of staff involved.
3. What are the corresponding population targets in (2) above?
4. Please provide any statements of your health agency policies, programs and activities concerning home accident prevention.

cont'd....2.

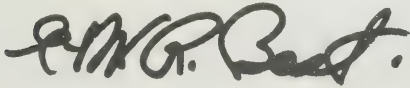
5. Have you established minimum service levels for home accident prevention? If so, please attach to your reply.

6. Please cite or provide references on home accident prevention which you have found useful.

7. Any other relevant comments would be appreciated.

Thank you for your reply.

Yours sincerely,

A handwritten signature in dark ink, appearing to read "E. W. R. Best". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

E. W. R. Best, M.D., D.P.H., F.R.C.P.(C),
Chairman,
Home Accident Prevention Committee.

EWRB/md

APPENDIX 2RESPONSES FROM MEDICAL OFFICERS OF HEALTH

On July 20, 1979 a letter was sent to all local Medical Officers of Health in Ontario. Thirty of forty three (70%) replied. The results are as follows:

Question One: Is there a need for your health agency to have minimum service levels for home accident prevention?

Response: Yes - 10 (33%)
No - 5 (17%)
Not answered - 15 (50%)
Only 2 (7%) provided data to support their reply.

Question Two: What home accident prevention programs and activities does your health agency presently provide?

Response: 28 (93%) Medical Officers of Health stated that home accident prevention activities were part of their general programs and did not constitute separately identified programs. One Medical Officer of Health identified that his health unit provided only an accidental poisoning prevention program. Another mentioned a Newborn Risk Profile.

The following kinds of present health agency activities were identified.

Nursing

- prenatal teaching
- postnatal teaching
- home visits to mother and infant - relevant comments
- home visits to parent and preschool child - give relevant information
- home visits to teenagers and adults - discussion of potential health hazards observed
- school visits - discussion with children and teachers
- home visits to adults and the elderly - give relevant information
- follow-up referrals from hospitals, physicians and other agencies
- look out for safety hazards during home visits, provide counselling and refer as appropriate
- carry out surveys
- distribute literature
- speak to community groups e.g. senior citizens
- appear on television programs
- instruction in parenting courses and to baby sitters
- distribute home safety check list
- write newspaper columns

Inspection

- administer city minimum standards by-law
- administer Ontario Home Renewal Program
- implement Ministry of Health Housing Guidelines
- receive complaints about home safety and refer to appropriate agency e.g. fire, building inspectors
- look out for safety hazards during visits, provide advice and refer as appropriate
- carry out surveys
- condemn buildings

Home Care (Nurses, Physiotherapists)

- look out for patient safety hazards, advise and refer as appropriate.

Question Three: What are the corresponding population targets in (2) above?

Response: At risk groups 26 (87%)
 Total population 7 (23%)
 Not stated 2 (7%)
 No target 1 (3%)
 Five Medical Officers of Health indicated both at risk groups and total population as targets

Question Four: Please provide any statements of your health agency policies, programs and activities concerning home accident prevention?

Response:

No statements available 27 (90%)
 Follow Ministry Guidelines for Public Health Nursing 2 (7%)
 Use Maternal and Child Health Supervision Flow Sheet 1 (3%)

Question Five: Have you established minimum service levels for home accident prevention?

Response: No - 28 (93%)
 Yes - 2 (7%)
 - follow-up poison referrals within 48 hours
 - Newborn Risk Profile Survey - every newborn

Question Six: Please cite or provide references on home accident prevention which you have found useful.

Response:

A wide variety of pamphlets and some teaching manuals and references were provided.

Question Seven:

Any other relevant comments would be appreciated.

Response:

- Mass media approach, similar to the Workmen's Compensation T.V. "shorts" might be effective
- Doubt success of requiring reporting of accidents
- Suggest more distinctive labelling of poisonous substances
- Home accident prevention should be taught in schools from kindergarten onwards
- Regular columns in all newspapers desirable
- Annual campaigns desirable e.g. Safety Week
- Adequate funding and staffing essential
- Main thrust of any home accident prevention program should be staff education and public awareness
- Main role may be reinforcing other agencies
- Health education, including home accident prevention should be a compulsory subject for graduation from secondary school
- Minimum service levels for home accident prevention should be based on the results of studies that have shown strategies that are effective in preventing home accidents
- Our only specific prevention program is one dealing with accidental poisoning. This has been difficult to get underway. With a proper legislative mandate, initiation and expansion of such a program might be much more possible.



Ontario

APPENDIX 3

Ministry of Health	416 965-5057	Fifth Floor,
of Programs		15 Overlea Boulevard,
Health Division		Toronto, Ontario.
		M4H 1A9.

LETTER TO PROVINCIAL AND NATIONAL ORGANIZATIONS

July 20, 1979.

.

.

Dear Sir/Madam:

The Minister of Health recently announced a number of new initiatives which the Ministry will take with respect to public health in Ontario. One of these is intended to make available to Ontario residents a core package of basic public health programs.

To do this, minimum service levels or standards will be developed for a number of programs. These minimum service levels will then be embodied in the new Health Protection Act, and will be offered by all local official health agencies in Ontario.

Among the committees which have been established to review each program and develop appropriate minimum service levels is that dealing with Home Accident Prevention. Our terms of reference are "to consider the development of minimum service levels or standards for home accident prevention programs which local official health agencies may be required, by statute and regulation, to implement".

At our first meeting on July 12, 1979 we adopted, for the present, the following definition "a home is a private dwelling which is owned or rented by the occupant".

We are now asking your own and other agencies interested in the prevention of home accidents to assist us in this project by responding to the following questions.

1. As you see it, what is the magnitude of the problem of home accidents?

cont'd....2.

2. What home accident prevention programs and activities does your health agency presently provide? Please indicate the types of staff involved.

3. What are the corresponding population targets in (2) above?

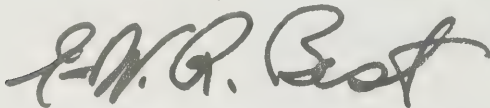
4. Please cite or provide references on home accident prevention which you have found useful.

5. Do you have any literature which might help us? Copies would be appreciated.

6. Any other relevant comments would be appreciated.

Thank you for your reply.

Yours sincerely,



E. W. R. Best, M.D., D.P.H., F.R.C.P.(C),
Chairman,
Committee on Home Accident Prevention.

EWRB/md

APPENDIX 4PROVINCIAL AND NATIONAL ORGANIZATIONS
RESPONDING TO THE COMMITTEE'S ENQUIRY

Association of Nursing Directors and Supervisors of
Ontario Official Health Agencies.

Association of Ontario Boards of Health.

Canadian National Institute for the Blind.

Canadian Institute of Public Health Inspectors (Ontario
Branch).

Canadian Red Cross.

Consumers Association of Canada.

Department of Health, Education and Welfare, U.S.A.

Department of Trade Accidents Investigation Branch, U.K.

Health Education Council, U.K.

Health and Safety Commission, U.K.

Health and Welfare Canada.

Ontario Hospital Association.

Hospital for Sick Children, Toronto, Ontario.

Ontario Hydro Commission.

Ontario Ministry of Community and Social Services.

Ontario Ministry of Education.

Ontario Society for Crippled Children.

Registered Nurses Association of Ontario.

Royal Society of Health, U.K.

Royal Society for the Prevention of Accidents, U.K.

Society of Medical Officers of Health of Ontario.

St. John Ambulance Ontario Council.

APPENDIX 5RESPONSES FROM PROVINCIAL AND NATIONAL ORGANIZATIONS

On July 20, 1979 a letter was sent to provincial and national organizations which it was thought would be interested in home accident prevention. The results are as follows:

Question One: As you see it, what is the magnitude of the problem of home accidents?

Response:

- . Ontario Society for Crippled Children -
"An educated guess might be that fewer than 5% of the approximately 7,000 children on our active case load have been handicapped through home injuries".
- . No additional information was provided on the magnitude of the problem.

Question Two: What home accident prevention programs and activities does your health agency presently provide?

Response:

- . Maternal and Child Health Programs, U.S., Department of Health Education and Welfare is starting up projects on home accident prevention through three state health departments. The targets will be poisoning, burns and trauma.
- . Active programs including home accident prevention are carried out by:
 - the Canadian National Institute for the Blind (educational)
 - the Consumers Association of Canada (influencing national policies and practices)
 - the Hospital for Sick Children, Toronto (Poison Control Centre)
 - the Ontario Hospital Association (encourages off-the-job safety programs as part of the work of occupational health and safety committees)
 - Ontario Hydro Commission (directly involved in preventive education respecting home accidents)
 - St. John Ambulance (all health care courses deal with accident prevention in the home)
 - the Ministry of Community & Social Services (detailed guidelines provided for institutions under COMSOC jurisdiction).

Question Three: What are the corresponding population targets in (2) above?

Response:

- . The Poison Control Centre, Hospital for Sick Children - primarily children
- . Ontario Hospital Association - approximately 150,000 health care employees
- . Ontario Hydro Commission - the total population of the Province
- . St. John Ambulance - children, patients and seniors in the home.

Question Four: Please cite or provide references on home accident prevention which you have found useful.

Response:

A wide variety of pamphlets and some teaching materials and references were provided.

Question Five: Do you have any literature which might help us?

Response:

Some references were provided.



Ontario

APPENDIX 6

Ministry Health
of Programs
Health Division

416 965-5057

Fifth Floor,
15 Overlea Boulevard,
Toronto, Ontario.
M4H 1A9.

CIRCULATION OF FINAL DRAFT REPORT

October 26, 1979.

TO: MEDICAL OFFICERS OF HEALTH.

c.c. Directors of Public Health Nursing.
Directors of Public Health Inspection.
Members of the Committee and Resource Persons.

Dear Doctor:

Re: Core Programs Project, Home Accident Prevention

Thank you for your reply to my letter, July 20, 1979.

Attached is the final draft report of the Home Accident Prevention Committee (October 24, 1979). The Committee would appreciate your comments and suggestions on this report including those of your Director of Nursing and Director of Public Health Inspection. These should be mailed to me by November 9th, 1979 in order to be considered during preparation of the final report.

For each of the three minimum service levels we would particularly request your comments and suggestions on the activities listed under the heading "What will the service consist of?", and also the estimated costs to your agency above the costs of present services along with supporting detail. If possible, additional costs should be shown for each minimum service level.

This draft report is also being sent to the organizations listed on the attachment for their information and any comments and suggestions.

Thank you for your reply.

Yours sincerely,

E.W.R. Best, M.D., D.P.H., F.R.C.P.(C),
Chairman,
Home Accident Prevention Committee.

Att.

EWRB/md

ONTARIO MINISTRY OF HEALTH
HOME ACCIDENT PREVENTION COMMITTEE
DRAFT REPORT OCTOBER 24, 1979

This Report has been sent to the following organizations for information and any comments and suggestions:

1. Association of Nursing Directors and Supervisors of Ontario Official Health Agencies.
2. Association of Ontario Boards of Health.
3. Canadian Institute of Public Health Inspectors, Ontario Branch.
4. Canadian National Institute for the Blind.
5. College of Family Physicians of Canada, Ontario Chapter.
6. Community Health Federation.
7. Consumers Association of Canada.
8. District Health Councils.
9. The Hospital for Sick Children, Toronto.
10. Ministry of Community and Social Services.
11. Ministry of Education.
12. Ontario Hospital Association.
13. Ontario Hydro Commission.
14. Ontario Medical Association.
15. Ontario Society for Crippled Children.
16. Red Cross Society.
17. Registered Nurses Association of Ontario.
18. Society of Medical Officers of Health of Ontario.
19. St. John Ambulance.

APPENDIX 7CLASSIFICATION OF HOME ACCIDENTS1. Accidental poisoning by drugs, medicaments and biologicals
(E850-E858)

- E850 Accidental poisoning by analgesics, antipyretics, antirheumatics
- E851 Accidental poisoning by barbiturates
- E852 Accidental poisoning by other sedatives and hypnotics
- E853 Accidental poisoning by tranquillizers
- E854 Accidental poisoning by other psychotropic agents
- E855 Accidental poisoning by other drugs acting on central and autonomic nervous systems
- E856 Accidental poisoning by antibiotics
- E857 Accidental poisoning by anti-infectives
- E858 Accidental poisoning by other drugs.

2. Accidental poisoning by other solid and liquid substances, gases and vapours (E860-E869)

- E860 Accidental poisoning by alcohol, not elsewhere classified
- E861 Accidental poisoning by cleansing and polishing agents, disinfectants, paints and varnishes.
- E862 Accidental poisoning by petroleum products, other solvents and their vapours, not elsewhere classified
- E863 Accidental poisoning by agricultural and horticultural chemical and pharmaceutical preparations other than plant foods and fertilizers
- E864 Accidental poisoning by corrosives and caustics, not elsewhere classified
- E865 Accidental poisoning from foodstuffs and poisonous plants
- E866 Accidental poisoning by other and unspecified solid and liquid substances
- E867 Accidental poisoning by gas distributed by pipeline
- E868 Accidental poisoning by other utility gas and other carbon monoxide
- E869 Accidental poisoning by other gases and vapours.

3. Accidental falls (E880-E888)

- E880 Fall on or from stairs or steps
- E881 Fall on or from ladders or scaffolding
- E882 Fall from or out of building or other structure
- E883 Fall into hole or other opening in surface
- E884 Other fall from one level to another
- E885 Fall on same level from slipping, tripping or stumbling
- E886 Fall on same level from collision, pushing or shoving, by or with other person
- E887 Fracture, cause unspecified
- E888 Other and unspecified fall.

4. Accidents caused by fire and flames (E890-E899)

- E890 Conflagration in private dwelling
- E891 Conflagration in other and unspecified building or structure
- E892 Conflagration not in building or structure
- E893 Accident caused by ignition of clothing
- E894 Ignition of highly inflammable material
- E895 Accident caused by controlled fire in private dwelling
- E896 Accident caused by controlled fire in other and unspecified building or structure
- E897 Accident caused by controlled fire not in building or structure
- E898 Accident caused by other specified fire and flames
- E899 Accident caused by unspecified fire

5. Accidents due to natural and environmental factors (E900-E909)

- E900 Excessive heat
- E901 Excessive cold
- E902 High and low air pressure and changes in air pressure
- E903 Travel and motion
- E904 Hunger, thirst, exposure, neglect
- E905 Venomous animals and plants as the cause of poisoning and toxic reactions
- E906 Other injury caused by animals
- E907 Lightning
- E908 Cataclysmic storms, and floods resulting from storms
- E909 Cataclysmic earth surface movements and eruptions.

6. Accidents caused by submersion, suffocation and foreign bodies (E910-E915)

- E910 Accidental drowning and submersion
- E911 Inhalation and ingestion of food causing obstruction of respiratory tract or suffocation
- E912 Inhalation and ingestion of other object causing obstruction of respiratory tract or suffocation
- E913 Accidental mechanical suffocation
- E914 Foreign body accidentally entering eye and adnexa
- E915 Foreign body accidentally entering other orifice

7. Other accidents (E916-E928)

- E916 Struck accidentally by falling object
- E917 Striking against or struck accidentally by objects or persons
- E918 Caught accidentally in or between objects
- E919 Accidents caused by machinery
- E920 Accidents caused by cutting and piercing instruments or objects
- E921 Accident caused by explosion of pressure vessel
- E922 Accident caused by firearm missile
- E923 Accident caused by explosive material
- E924 Accident caused by hot substance or object, caustic or corrosive material and steam

- E925 Accident caused by electric current
- E926 Exposure to radiation
- E927 Overexertion and strenuous movements
- E928 Other and unspecified environmental and accidental causes

SOURCE:

Manual of the International Statistical Classification of Diseases, Injuries and Causes of Death, International Classification of Diseases, 1975 Revision Volume 1, W.H.O., Geneva, 1977 (I.C.D.9).

APPENDIX 8PROJECT FACTS*

(First Aid Community Training for Safety)

AIM

To test the theory that extensive First Aid training can lower the accident rate in industry and throughout the community.

METHODSOne - Data from Industrial Settings

1. Bell Canada Data Analysis
2. Ontario Northland Railway Data Analysis
3. Company A
4. Company B
5. International Nickel Company of Canada Data Analysis

Two - Orillia Survey

1. Summer of 1970
2. Summer of 1971
3. Summer of 1972

Three - Data from Workmen's Compensation BoardABSTRACT

"The data suggest:

a) In industrial settings, first aid trained employees can have significantly reduced accident rates, perhaps by as much as 30 - 40% under optimal conditions. (See Table 5, page 43).

b) In non-industrial settings, while first aid training increases safety relevant attitudes and information, it does not by itself result in major modifications of unsafe habits (e.g. not wearing auto seat belts).

We conclude that in order to modify unsafe habits, safety training must be supplemented by frequent and obvious reinforcing safety "signals" in the immediate environment.

In order to more realistically estimate the current "cost" of accidents, and to evaluate the effectiveness of current and future prevention programs, an accident

study centre is required. The first task of such a centre would be to establish a data base and to derive an indexing system from currently available information; an improved data base and index system could be introduced in phases, or in limited regions".

* Source: N. Agnew and G. Miller, Project FACTS
(First Aid Community Training For Safety)
Final Report, York University, February 1973.

TABLE 5

REDUCTION OF INDUSTRIAL ACCIDENTS IN FIRST AID

TRAINED EMPLOYEES IN FIVE COMPANIES*

Company	Observed Accidents in First Aid Trained Employees 0	Expected Accidents In First Aid Trained Employees E	Percentage Reduction $\frac{E - 0}{E} \times 100$	Observation Period
Bell Canada	2401	3720	35	3 years
Ontario Northland Railway	341	378	10	2 years
Company A	45	70	36	4 months
Company B	35	46	24	6 months
International Nickel Co.	233	302	23	11 months
T O T A L:	3055	4516	32	

* Source: Project FACTS Final Report, N. Agnew and G. Miller, York University, February 1973.

APPENDIX 9

ST. JOHN AMBULANCE

SAFETY ORIENTED FIRST AID COURSES1. The Lifesaver Course (2½ hours)

The Lifesaver is a two and a half hour course in multi media format that teaches skills that could save a life in an emergency. It deals with resuscitation techniques, with what to do when someone is unconscious, stops breathing, is bleeding severely or is choking. It teaches first aid priorities, what to do first, how to deal with multiple casualties.

2. The Emergency Course (8 hours)

The Emergency First Aid Course teaches basic First Aid procedures and manual skills which can be applied without special equipment and in the absence of medical help or supervision to:

preserve life
minimize the effects of injury
promote recovery.

3. The School Course (8 hours)

The Safety Oriented First Aid Course for Schools, Colleges and Universities is an eight hour course presenting basic safety oriented First Aid in a multi-media form that will adapt to any timetable requirement. It involves film and practice sessions and a series of 13 self instruction booklets. The program also includes supplemental teaching aids.

4. The Standard Course (16 hours)

The Standard First Aid Course is a 16 hour intensive First Aid course that includes both written and practical tests. Certification in Standard First Aid is available to anyone, but required for people who wish to teach either the Emergency or Standard course. It is required by the Workmen's Compensation Board for First Aiders in firms with more than five employees. Others trained to the Standard level include the St. John Ambulance Brigade, policemen, fire fighters, teachers, playground supervisors, nursing and medical students.

APPENDIX 10REJECTION OF HOME ACCIDENT SURVEILLANCE

In the final draft report (October 24, 1979) a fourth minimum service level was proposed, i.e. the Local Official Health Agency shall maintain surveillance of the extent and nature of unsafe human and environmental factors in the home and initiate appropriate action.

Much concern was expressed by Medical Officers of Health on implementation of this requirement for the following reasons:

- . It could constitute a violation of personal rights to privacy in the home.
- . Confidentiality of information could be a problem.
- . Hostility of residents should be expected.
- . The original purpose of the home visit could be defeated.
- . Reporting by health services personnel and health agencies would probably be fragmentary to the point of uselessness.
- . Surveillance services would be costly.
- . The cost of surveillance services would probably far outweigh benefits.

The Committee agreed with these opinions and withdrew the proposed minimum service level on surveillance and follow-up.

BIBLIOGRAPHY

1. American Public Health Association, Accident Prevention, The Role of Physicians and Public Health Workers, McGraw-Hill, 1961.
2. E.M. Backett, Domestic Accidents, World Health Organization, Public Health Papers, No. 26, 1965.
3. The Royal Bank of Canada Monthly Letter, Fatal Home Accidents CAN be avoided, February, 1968
4. R.G. Scherz, Prevention of Childhood Poisoning, Pediatric Clinics of North America, 17:3, p.p. 713 - 727, August, 1970.
5. R.L. Siebenetal, Falls as Childhood Accidents: An Increasing Urban Risk, Pediatrics, 47:5, May, 1971
6. McGuire, M.C., Preventive Measures to Minimize Accidents Among the Elderly, Occupational Health Nursing 19, 13, 1971.
7. Lucht, U., A Prospective Study of Accidental Falls and Resulting Injuries in the Home among Elderly People, Acta Socio-Medica, Scandinavica 3, 105, 1971.
8. N. Agnew and G. Miller, Project FACTS (First Aid Community Training for Safety), Final Report, York University, February, 1973.
9. J.A. Waller, Current Issues in the Epidemiology of Injury, American Journal of Epidemiology 98:2 p.p. 72 - 75, 1973.
10. R.S. Alphey and S.J. Leach, Accidental Death in the Home, Royal Society of Health Journal, 94:3 p.p. 97 - 102 and p.144, June, 1974.
11. Health Education Council (U.K.) Medical Research Division, Studies of Home Accidents in Bristol. Report No. 86, June, 1974.
12. Ibid, Studies of Accidents in North East Bristol, Report No. 88, June, 1974.
13. Ibid, Home Accidents and Health Education Investments, Report No. 116, July, 1974.
14. Ibid, Commentary on 'Home Accidents and Health Education Investments' Report No. 117, July, 1974.
15. Ibid, Draft Summary of the Home Accident Project, November, 1974.
16. E.V. Beverley, Reducing Fire and Burn Hazards Among the Elderly, Geriatrics/107:p.p. 106 - 110, May, 1976.

17. Department of Prices and Consumer Protection Collection of Information on Accidents in the Home, Proposals for an Accident Surveillance System. H.M.S.O., U.K., 1976.
18. L.K. Garrettson, The Child Resistant Container: A Success and a Model for Accident Prevention, American Journal of Public Health 67:2 p.p. 135 - 136, February, 1977.
19. M.S. McIntire et al, Safety Packaging - What Does The Public Think, American Journal of Public Health, 67:2 p.p. 169 - 171, February, 1977
20. G.K. Tokuhata et al, Fatal Injuries Attributed to Consumer Products in Pennsylvania, 1971, Public Health Reports, 92:4 July - August, 1977.
21. L.H. Gustafsson, Childhood Accidents, Scandinavian Journal of Social Medicine 5:1, p.p. 5 - 13, 1977.
22. C.N. Spiegel and F.C. Lindaman, Children Can't Fly: A Program to Prevent Childhood Morbidity and Mortality from Window Falls, American Journal of Public Health, December, 1977, 67:12 p.p. 1143 - 1147, December, 1977.
23. D.A. Dershewitz and J.W. Williamson, Prevention of Childhood Household Injuries: A Controlled Clinical Trial. American Journal of Public Health, 66:12, p.p. 1148 - 1153, December, 1977.
24. H. Haffey, Causes of Injury, 1974, 1975, 1976 and 1977, Hospital for Sick Children, Toronto.
25. Canada Safety Council, Accident Fatalities, Canada, 1977.
26. World Health Organization, Manual of the International Statistical Classification of Diseases, Injuries and Causes of Death, International Classification of Diseases, 1975 Revision, Volume 1, W.H.O., Geneva, 1977, (I.C.D.9).
27. St. John Multi-Media First Aid Training Offered in All Schools in Ontario, Lifeguard 2:3, December 1977/January 1978.
28. St. John Ambulance, Patient Care in the Home, 1965.
29. Ibid, Child Care in the Home, 1971.
30. Ibid, The Lifesaver Course Leaders Guide, 1978.
31. St. John Ambulance Ontario Council, Annual Report, 1978
32. Ontario Hydro, Electrical Accidents to the Public In Ontario - 1978.
33. National Safety Council, (U.S.A.) Off-the-Job Safety, Data Sheet 1 - 601 - 78, Revised 1978.

34. Ibid, Accident Facts, 1978.
35. Ontario Ministry of Community and Social Services, Guidelines Designing for Hearing Handicapped Persons, December 5, 1978.
36. Ibid, Social Services Guidelines Designing for Visually Handicapped Persons, December 19, 1978.
37. Ibid, Guidelines Designing for Wheelchair Handicapped Persons, June 15, 1979.
38. Department of Prices and Consumer Protection, Children at Greatest Risk in the Home. Care in the Home, The Royal Society for the Prevention of Accidents, July, 1979 (A quarterly publication).
39. Editorial, Accident Prevention in Childhood, The Lancet, p.p. 564 - 5, September 15, 1979.
40. Canadian Task Force on the Periodic Health Examination, The Periodic Health Examination, Canadian Medical Association Journal, 121: p.p. 1193 - 1254, November 3, 1979.
41. St. John Ambulance and the Canadian Red Cross Society, There's No Place Like Home For Health Care, 1978 (a series of twelve books, one of which is entitled "Safe and Sound").
42. The Canadian Red Cross Society, First Aid For You and Me, 1979, 14th Edition (Originally published in 1943).
43. Ibid, Basic Homemaker Course (Under revision)

